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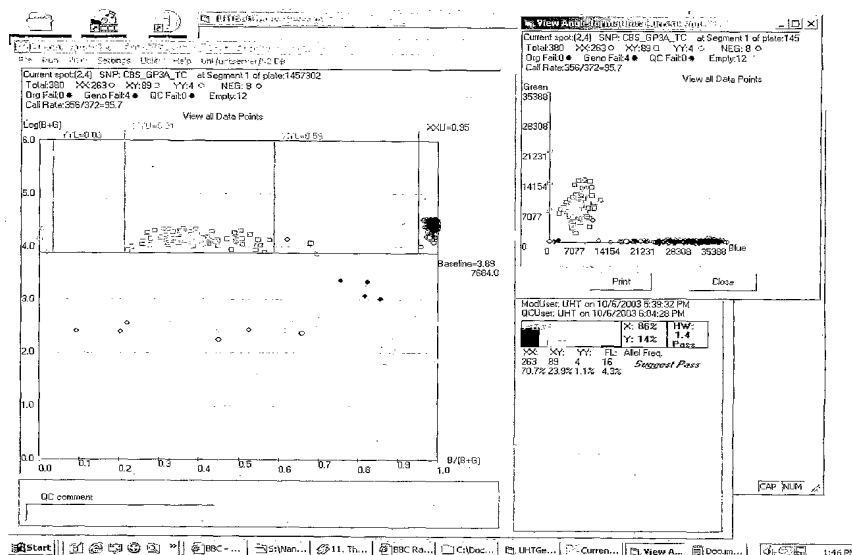
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(54) Title: A METHOD FOR THE SIMULTANEOUS DETERMINATION OF BLOOD GROUP AND PLATELET ANTIGEN GENOTYPES



(57) Abstract: RBC and platelet (Plt) alloimmunization requires antigen-matched blood to avoid adverse transfusion reactions. Some blood collection facilities use unregulated Abs to reduce the cost of mass screening, and later confirm the phenotype with government approved reagents. Alternatively, RBC and Plt antigens can be screened by virtue of their associated single nucleotide polymorphisms (SNPs). We developed a multiplex PCR-oligonucleotide extension assay using the GenomeLab SNPStream platform to genotype blood for a plurality of blood group antigen-associated SNPs, including but not limited to: RhD (2), RhC/c, RhE/e, S/s, K/k, Kp<sup>a/b</sup>, Fya/b, FYO, Jk<sup>a/b</sup>, Di<sup>a/b</sup>, and HPA-1a/b.



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